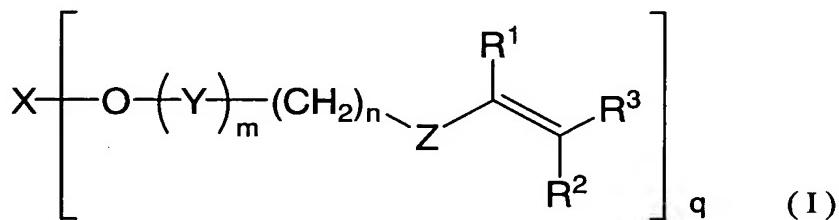


What is claimed is:

1. A poly(phenylene ether) resin composition comprising a poly(phenylene ether) and a crosslinking curing agent, wherein said polyphenylene ether is represented by the following formula (I), and the number averaged molecular weight thereof is in a range of 1,000 to 7,000.

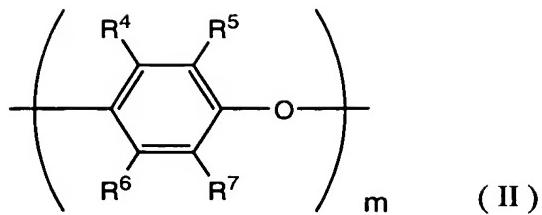


[wherein, X is an aryl group; $(Y)_m$ is a polyphenylene ether moiety; Z is a phenylene group, an oxygen atom or a sulfur atom; R^1 to R^3 each independently is a hydrogen atom, an alkyl group, an alkenyl group or alkynyl group; n is an integer of 1 to 6; and q is an integer of 1 to 4.]

2. The poly(phenylene ether) resin composition according to claim 1, wherein Z is a phenylene group and n is 1.

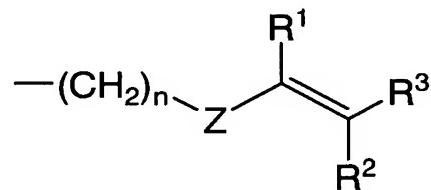
3. The poly(phenylene ether) resin composition according to claim 1, wherein Z is an oxygen atom and n is 2.

4. The poly(phenylene ether) resin composition according to any one of Claims 1 to 3, wherein $(Y)_m$ is represented by the following formula (II).



[wherein, R⁴ to R⁷ each independently is a hydrogen atom, an alkyl group, an alkenyl group, an alkynyl group or an alkenyl carbonyl group; and m is an integer of 1 to 100.]

5. The poly(phenylene ether) resin composition according to Claim 1 or 2, wherein the portion represented by the following formula selected from *p*-ethenybenzyl and *m*-ethenybenzyl groups.



6. The poly(phenylene ether) resin composition according to Claim 1, wherein the mass ratio represented by [the poly(phenylene ether)] / (the crosslinking curing agent) is 30/70 to 90/10.

7. The poly(phenylene ether) resin composition according to any one of Claims 1 to 3, further comprising a poly(phenylene ether) having a number averaged molecular weight in a range of 9,000 to 18,000.

8. The poly(phenylene ether) resin composition according to Claim 4, further comprising a poly(phenylene ether) having a number averaged molecular weight in a range of 9,000 to 18,000.

9. The poly(phenylene ether) resin composition according to Claim 5, further comprising a poly(phenylene ether) having a number averaged molecular weight in a range of 9,000 to 18,000.

10. The poly(phenylene ether) resin composition according to Claim 6, further comprising a poly(phenylene ether) having a number averaged molecular weight in a range of 9,000 to 18,000

11. The poly(phenylene ether) resin composition according to Claim 1, wherein said crosslinking curing agent is trialkenyl isocyanurate.

12. The poly(phenylene ether) resin composition according to Claim 1, wherein said crosslinking curing agent is a tri- to penta-functional (meth)acrylate compound.

13. The poly(phenylene ether) resin composition according to Claim 1, further comprising at least one kind of organic or inorganic filler.

14. The poly(phenylene ether) resin composition according to Claim 13, wherein said filler has an average diameter of 10 μm or less.

15. The poly(phenylene ether) resin composition according to Claim 13 or 14, wherein said filler is a hollow substance.

16. The poly(phenylene ether) resin composition according to Claim 1, wherein said filler is a substance prepared from a fluorine-containing compound.

17. The poly(phenylene ether) resin composition according to Claim 1, further comprising a flame retardant.

18. The poly(phenylene ether) resin composition according to Claim 17, wherein said flame retardant is a bromine compound having a bromine content of 8 to 20 mass % with respect to the total amount of the composition.

19. A prepreg prepared by impregnating the poly(phenylene ether) resin composition according to Claim 1 into a substrate and semi-curing the resulting impregnated substrate.

20. The prepreg according to Claim 19, wherein said

substrate is an NE-type glass cloth.

21. A laminated sheet prepared by piling the prepreg according to claim 19 or 20 and copper foil(s) one over the other under heat-pressing.

22. The laminated sheet according to Claim 21, wherein said copper foil has a surface roughness of 2 μm or less, and the surface thereof facing the prepreg is treated with zinc or a zinc alloy and at the same time coupled with a silane coupling agent having a vinyl group.